



# **DLA Logistics R&D Parts Management Project**

DLA J-33  
Presentation to the PSMC  
21 April 2010

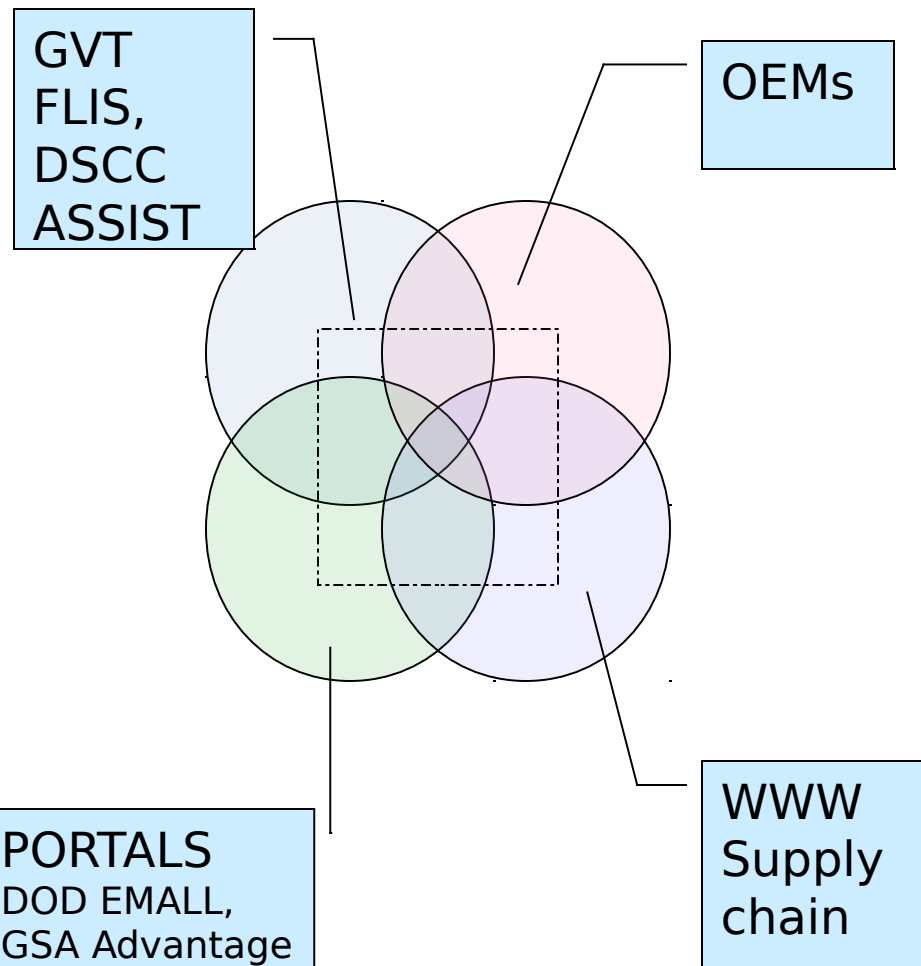


# Agenda

- Introduction
  - Motivation
  - Team
  - Approach
- What we've seen so far . . .
  - Data landscape
  - Suppliers
  - Weapon systems
- Next steps



# Parts Management Project Motivation



- Can we demonstrate a practical application of technologies recently developed for the DLA Log R&D program?
- Can we share information about common commodity parts and standardize more efficiently?
- Can we build a cross supply chain network that extends to the Services, DLA, and defense industry/weapon system integrators?



**NORTHROP GRUMMAN**

CAGE: 00779  
Part No: 1-480698-0  
CONNECTOR, PLUG, MATE N  
LOCK, 2 POSITION



TYCO ELECTRONICS  
PRODUCT CHANGE  
NOTIFICATION E-07-02543



Connector Housing Receptacle 2  
Position 6.35mm Straight Loose  
Piece  
Manufacturer AMP  
Catalog no. 526731  
Price: \$0.25  
Shipping: 3 days ARO

**INFORMATION INTEGRATION  
FROM THE SUPPLY WEB**

**Defense Supply Center Columbus**

CONNECTOR, RECEPTICAL  
ELECTRICAL,  
PLUG HOUSING  
Drawing No. 87097-001

45 DIFFERENT  
WEAPON SYSTEMS  
FROM MULTIPLE  
SERVICES

**Defense Logistics Information Service**

CONNECTOR BODY, PLUG, ELECTRICAL  
NSN 5935010961872



Newark Allied John B Ruby  
Electronics Electronics





**TQ**

- Christine Metz - Project Sponsor

**WSSP**

- Cliff Wolfe – Project Sponsor

**DLIS**

- Larry Mullins, Mike Rose
- NSN Data Sharing and Validation
- FIIG development

**DSCC**

- Gary Watson
- Data Sharing and Validation
- Attribute Development

**LMI**

- Bruce Kaplan
- Prime Contractor, Project Management
- Business Case Analysis

**XSB**

- Rupert Hopkins, Robert Pokorny
- Data mining analysis and standardization
- Data Escrow Developer

**NGC**

- Edward Zelinski
- OEM Data Sharing and Validation
- Attribute development

# TEAM EFFORT



# Approach

- Identify a commodity – initially connectors and will select another commodity in the next phase
- Characterize that commodity by analyzing recently procured items
- Identify major suppliers, specifications and standards
- Use Focused Crawlers and ontology based technologies to acquire, extract and standardize attributes from OEMs, Government, Suppliers, DSCC Drawings, Specs and standards, etc.
- Develop a common parts database with information sharing rules and restrictions. Measure the ability to reduce duplicate NSNs, inventory, etc
- Develop a Business Case by quantifying opportunities for cost savings through reduction of identical and similar items



# What we've seen so far

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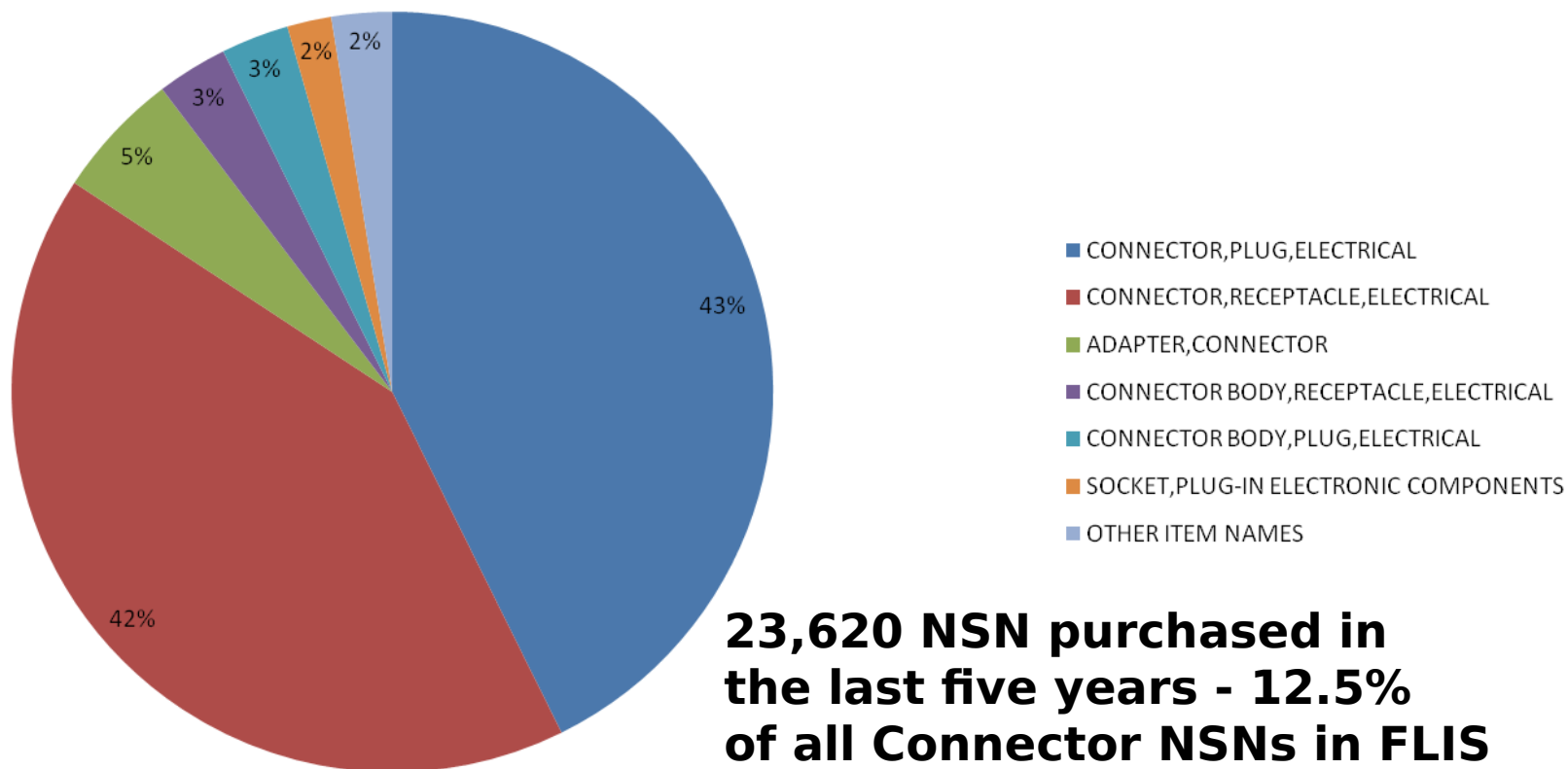
# Connectors Defined in FLIS Item Names

INC	Item Name	FIIG	FIIG Title
15091	ADAPTER,CONNECTOR ELECTRICAL	A039B0	CONNECTOR,
38437	CONNECTOR BODY,MODULAR PLUG,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
38438	CONNECTOR BODY,MODULAR RECEPTACLE, ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
61924	CONNECTOR BODY,PLUG,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
61925	CONNECTOR BODY,RECEPTACLE,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
68174	CONNECTOR,BULKHEAD,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
38439	CONNECTOR,MODULAR PLUG,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
38440	CONNECTOR,MODULAR RECEPTACLE,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
01938	CONNECTOR,PLUG,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
15093	CONNECTOR,RECEPTACLE,ELECTRICAL ELECTRICAL	A039B0	CONNECTOR,
38441	INSERT MODULE,ELECTRICAL CONNECTOR ELECTRICAL	A039B0	CONNECTOR,





## NSN by Item Name Purchased in last 5 Years





# Suppliers associated to NSN Connectors

28 Suppliers are listed as sources for 1000 or more NSN Connectors  
Over 6500 Suppliers are listed as sources for at least one NSN connector

Many of the top suppliers are Prime Contractors and not the actual connector manufacturer  
**Top 28 Suppliers**

Count of NSNs	Supplier	Count of NSNs	Supplier
22,424	<b>AMPHENOL*</b>	2,671	CONTINENTAL CONNECTOR
14,265	<b>ITT*</b>	2,520	L-3 COMMUNICATIONS
11,158	<b>TYCO ELECTRONICS*</b>	2,316	<b>CINCH MANUFACTURING*</b>
9,546	<b>NORTHROP GRUMMAN DEFENSE MISSION SYSTEMS</b>	1,916	HEWLETT-PACKARD
9,298	<b>RAYTHEON</b>	1,820	GENERAL-ELECTRIC
7,210	<b>LOCKHEED MARTIN</b>	1,638	AUTOMATIC CONNECTOR
6072	<b>WINCHESTER ELECTRONICS*</b>	1,557	ITT-CANNON RF PRODUCTS
4,200	<b>BOEING</b>	1,552	KYOCERA
4,160	<b>BAE SYSTEMS</b>	1,429	AGILENT TECHNOLOGIES
3,179	<b>AIRBORN INTERCONNECT*</b>	1,400	ROCKWELL-COLLINS
2,976	<b>DEUTSCH ENGINEERED CONNECTING DEVICES*</b>	1,371	<b>MOLEX*</b>
2,933	<b>HONEYWELL INTERNATIONAL</b>	1,363	<b>FCI*</b>
2,813	<b>ROCKWELL-COLLINS DIV GOVERNMENT SYSTEMS</b>	1,110	US COMPONENTS
2,729	<b>SOURIAU*</b>	1,040	DELPHI CONNECTION SYSTEMS

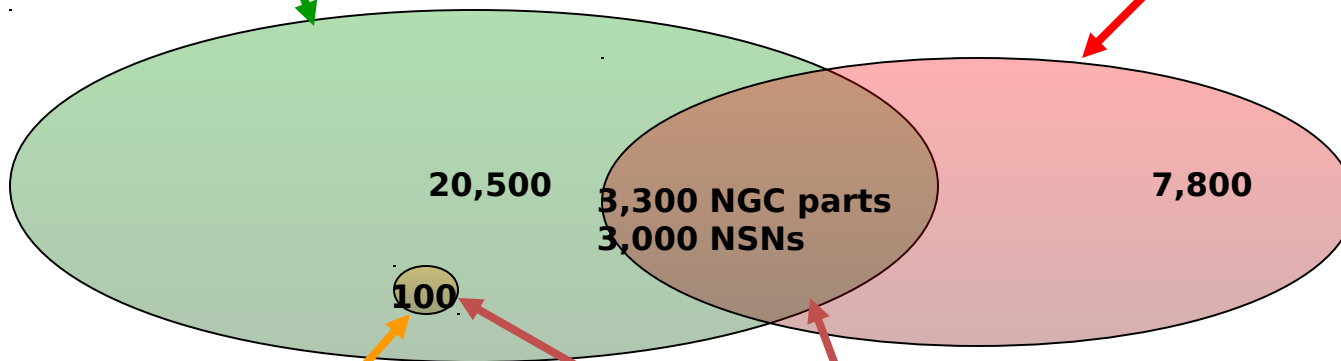
\* These suppliers are also major suppliers for NGC Connectors



# Recently Purchased Common Parts Population

**FLIS Connectors purchased in Last 5 years ~23,600**

**NGC Connectors purchase In last 3 years ~11,100**



**NSNs with NGC reference numbers but not in NGC connectors ~100**

**3000 Recently Purchased Common Connectors Between FLIS and NGC**



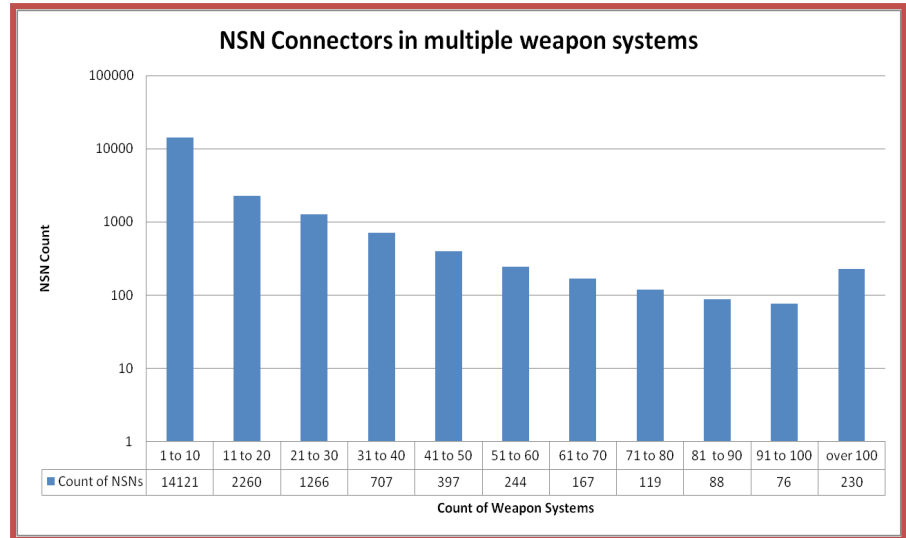
# Common Parts Weapon System Distribution

- 31,000 Connector NSNs are common with NGC connectors
- 11,000 of these NSNs have no weapon system association in FLIS\*
- The balance of these NSNs have one or more weapon system associations

## Counts of NSN connectors for top 10 weapon systems

NSN Count	Weapon System
3,892	NIMITZ CLASS CVN
3,302	ARLEIGH BURKE CLASS DDG
3,296	AIRCRAFT, HORNET F/A-18
3,278	AIRCRAFT, HORNET F/A-18 (E/F)
3,272	AIRCRAFT, FA-18, A - D, E/F, G (GROWLER)
3,264	EA-18G (GROWLER)
3,236	AIRCRAFT, TOMCAT F-14
3,188	TICONDEROGA CLASS CG (47)
3,090	WASP CLASS LHD
2,883	HELICOPTER, SEAHAWK, H-60

## Counts of NSN connectors found on multiple weapon systems



\* It is anticipated that these items will have one or more weapon system identified in the NGC data



# Next Steps

- Identify a second OEM & Commodity
- Develop common parts database and provide role based access to connector data with a design that will be easily expandable to additional part domains
- Field Commodity data by 1 June 2010
- Establish business case



# Business Case Development

LMI will develop a BCA based on the benefit of information sharing for part selection, cataloging, inventory, procurement, and other processes.

- The BCA will address projected benefits for DLA and OEMs to mitigate NSN proliferation through the sharing of technical characteristics and source data for common commodity parts,
- Implications of the data sharing for improving the Federal Catalog,
- The opportunity to improve part selection practices through the implementation of a MIL-STD-3018 process.



# Potential Benefits

## For the OEM:

- Identification of duplicate parts to be combined.
- Identification of technically similar parts for parts management action (potential consolidation)
- Identification of preferred parts for future design..

## For DLA ICPs:

- Identification of additional sources for parts, particularly for sole source parts
- Approval of those sources
- Identification of potential duplicate items.

## For DLIS:

- Addition of item characteristic data to the catalog
- Potential to consolidate/cancel NSNs.
- Addition of additional sources to the FLIS.
- Update of FIIGs.

